



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/534,451

11/10/2005

Eduard Herda

034423/292369

4786

826

7590

02/02/2009

ALSTON & BIRD LLP

BANK OF AMERICA PLAZA

101 SOUTH TRYON STREET, SUITE 4000

CHARLOTTE, NC 28280-4000

EXAMINER

KENNEDY, TIMOTHY J

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

02/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,451	Applicant(s) HERDA, EDUARD	
	Examiner TIMOTHY KENNEDY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/10/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, drawn to a spinneret plate.

Group II, claim(s) 7-9, drawn to a spin packet.

Group III, claim(s) 10, drawn to fabric manufacturing device.

Group IV, claim(s) 11-14, drawn to a method of cooling spinning molten polymer.

2. The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common technical feature in all groups is a spinneret plate with non-round holes, and the common technical feature further connecting Groups III and IV is cooling and/or stretching spinning polymer using gas. These element cannot be special technical features under PCT Rule 13.2 because the element is shown in the prior art. U.S. Patent 3,109,195 (column 4, lines 29-41 and all figures) teach the use of a spinneret plate with non-round holes and cooling with a gas as claimed in claims 1, 7, 10, and 11.
3. During a telephone conversation with Raymond Linker on 1/21/2009 a provisional election was made with traverse to prosecute the invention of Group I, claim

Art Unit: 1791

1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claim 7-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. The listing of the reference German Patent DE3634146A1 in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

6. The disclosure is objected to because of the following informalities: the referencing of claim numbers 1, 7 and 11 on page 1, lines 34-36 and page 2, line 1, is inappropriate.

Appropriate correction is required.

Claim Objections

7. Claim 5 is objected to because of the following informalities: There is no antecedent basis for the term "region" in claim 5, from claim 1. It appears it should be "row", and will be treated as "row". Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Examiner wishes to point out to applicant that claims 1-6 are directed towards an apparatus and as such will be examined under such conditions. The material worked upon or the process of using the apparatus is viewed as recitation of intended use and is not given patentable weight (Please see MPEP 2114 R1-2115 R2 for further details).

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Takemoto et al (U.S. Patent 4,812,361). Regarding claim 1, Takemoto et al teach:

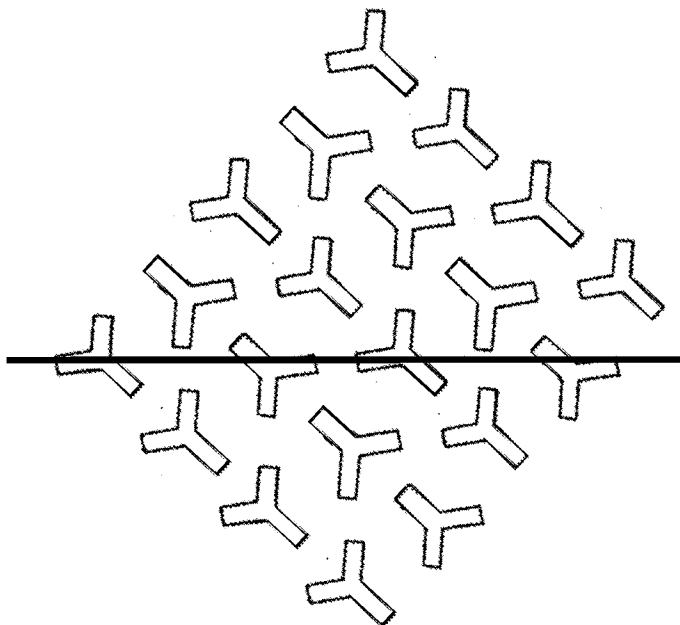
11. A spinneret plate, having multiple non-round holes, which are similar to trilobal or multiarmed holes, in which identical holes being positioned in rows offset to one another, wherein at least one first row has a positional arrangement of the holes which differs from the positional arrangement of a second row of rows through rotation of the holes.

12. Takemoto et al teach a spinneret plate with multiple trilobal holes, oriented offset to each other in rows. The holes in the rows have different positional arrangements, through rotation. (column 3, lines 6-12 and Figure 4B)

Art Unit: 1791

13. When Figure 4B is expanded to show more rows, and then rotated, a new set of rows appear that anticipate the claimed structure of the spinneret plate and holes as claimed in claim 1.

Figure A)



14. As seen in Figure A the trilobal holes are offset to each other from row to row, and the holes also are position differently through a rotation (the line is to show the position of the rows)

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1791

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al, in view of Ortega et al (U.S. PreGrant Publication 2001/0055682). Regarding claim 2, Takemoto et al does not teach:

17. Wherein the spinneret plate has at least two different types of holes

18. In the same field of endeavor, Ortega et al teach the use of a spinneret plate with holes of different cross sections or sizes (paragraph 0024).

19. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a spinneret plate with holes having different cross sections or sizes, as taught by Ortega et al, using the Takemoto et al plate, since creating fabrics having fibers with more than one cross section, allows for better packing of the fibers which creates a denser product, and it also creates more surface area within the product.

20. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al, in view of Hagen et al (U.S. Patent 5,393,219). Regarding claim 3, Takemoto et al does not teach:

21. Wherein the spinneret plate is divided into at least two regions, in which the first region and the second region each have two or more rows of identical holes

22. In the same field of endeavor Hagen et al teach the use of a spinneret plate that has two regions of identical holes (Figure 9).

23. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the spinneret hole groupings as taught by Hagen et al, using

Art Unit: 1791

the trilobal holes and orientation as taught by Takemoto et al, since it would have been obvious to try to arrange the holes in this orientation since multiple hole grouping orientations are known in the art, in order to create the desired effect during the spinning process. It has been shown that a person of ordinary skill has good reason to pursue the known options in their art. If this lead to an anticipated success, it is likely that it was not due to innovation but of ordinary skill and common sense. *KSR*

International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1397 (2007)

24. Regarding claim 4:

25. Wherein the first region has a positional arrangement of the holes which is rotated by 180 degrees in relation to the positional arrangement of the holes in the second region.

26. Takemoto et al teach changing the positional arrangement of the holes (as discussed above for claim 1), and Hagen et al teach creating two groups of holes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to orient the holes in any angular orientation since it obvious to try different orientations to determine the best results during the spinning process. It has been shown that a person of ordinary skill has good reason to pursue the known options in their art. If this lead to an anticipated success, it is likely that it was not due to innovation but of ordinary skill and common sense. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007)

27. Regarding claim 5, Hagen et al teach, for the reasons stated previously:

Art Unit: 1791

28. Wherein at least the first region and the second region are separated from one another by a gap (Figure 9, the gap between the two hole groupings)

29. Regarding claim 6, Hagen et al teach, for the reasons stated previously:

30. Wherein the gap is the same size or larger than a distance between two rows of identical holes.

31. Hagen et al show a gap in Figure 9 between the two hole groupings, but does not state a distance, but it is obvious that the two groupings are separated by the distance between two rows.

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

33. U.S. Patent 3,718,534: holes orientation and different holes

34. U.S. Patent 4,357,290: Different hole orientations and groupings

35. U.S. Patent 5,125,818: Different non round holes

36. U.S. Patent 5,208,107: Hole offset

37. U.S. Patent 6,746,230: Hole orientation

38. JP 01020315 (Already of Record): Segmented groupings of oriented trilobal holes

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY KENNEDY whose telephone number is (571) 270-7068. The examiner can normally be reached on Monday to Friday 9:00am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571) 272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tjk

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 1791